# 作业 #6

1. Define a function that can calculate 1+2+3+…+n, and call it to output the value of 1+2+3+…+999.

2. Define a function that can calculate m+(m+1)+(m+2)+…+n, and call it to output the value of 56+57+58+…+345.

3. int sum_of_digits(long n) is a function that can calculate the sum of all the digits of a long integer , define the function *sum_of_digits* and write a main function to test it.
   **[sample]**

```
Enter a long integer: 1234567890
The sum of the digits is 45
```

```
Enter a long integer: 72003
The sum of the digits is 12
```

4. Define a function that can check out whether a long integer is prime or not, and write a main function to test it.

5. Define a function that can check out whether a string is palindrome or not, and write a main function to test it.

6. Define a function that can check out whether three edges can form a triangle, and write another function to test it.
   **[sample]**

```
Enter three edges: 1.0 2.0 3.0
Can NOT form a triangle!
```

```
Enter three edges: 4 5 3
Can form a triangle!
```

7. Define a function that can arrange elements in the list according to their values in descending order, and call it to sort some integers.

8. Define a ***recursive*** function that can compute 1+3+5+7+…, and call it to output the value of 1+3+5+…+999.
   **[sample]**

```
Enter an odd: 999
1+3+5+...+999= 250000
```

```
Enter an odd: 9
1+3+5+...+9= 25
```